

**Title: SYSTEM TO VARY CAPACITANCE BASED
ON A CONTROL SIGNAL**

ABSTRACT

Some embodiments provide a plurality of capacitors coupled in parallel and a
5 plurality of capacitor switches, each one of the capacitor switches coupled in series with a
respective one of the plurality of capacitors. Also provided may be a plurality of control
circuits, each of the plurality of control circuits coupled to a respective one of the
plurality of capacitor switches, to generate a respective control voltage, and to
independently set a respective one of the plurality of capacitor switches to the respective
10 control voltage, and a plurality of control switches, each of the plurality of control
switches to couple and to decouple a respective one of the plurality of control circuits to
and from a control signal.